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APPENDIX I

ALACENTM 895

Whey Protein Isolate

P613.04.0898

ALACEN 895 is a soluble, 93% milk protein product with low fat, lactose and cholesterol giving nutritional benefits as well as providing enhanced functional and flavour properties.

Functionally, ALACEN 895 is a specialised protein providing acid/heat stability, solution clarity and aeration stability.

PRODUCT CHARACTERISTICS

- Excellent whipping capability
- Clean flavour
- Low lactose
- Low fat and low cholesterol content
- Acid/heat stability
- Soluble over a wide pH range
- Excellent nutritional properties

SUGGESTED USES

ALACEN 895 is particularly useful for applications which are flavour sensitive and require a nutritional protein product.

- High protein beverages
- Low fat and low lactose foods
- Meringue and whipped toppings
- Protein fortified nutritional foods

TYPICAL COMPOSITION

| | |
|-------------------------|--------------|
| Energy | 1616 kJ/100g |
| Protein (N x 6.38) | as |
| is | 93.1% |
| dry basis | 96.6% |
| Fat | 0.6% |
| Moisture | 3.6% |
| Ash | 1.6% |
| Lactose (by difference) | 1.1% |

TYPICAL CHEMICAL ANALYSES

| | |
|-----------------|-----|
| pH (5% at 20°C) | 6.8 |
|-----------------|-----|

PHYSICAL PROPERTIES

| | |
|-----------------|--------|
| Colour | Cream |
| Flavour | Clean |
| Sediment (50 g) | Disc A |

TYPICAL MICROBIOLOGICAL

| | |
|---------------------------------------|----------|
| Aerobic Plate Count (cfu/g) | < 30,000 |
| Coliforms (1g) | Negative |
| Yeasts and moulds (cfu/g) | < 10 |
| Coagulase Positive Staphylococci (1g) | Negative |
| Salmonella (750g) | Negative |

TYPICAL MINERAL COMPOSITION

| | |
|-------------|--------------|
| Sodium | 484 mg/100g |
| Potassium | 80.1 mg/100g |
| Chloride | 21 mg/100g |
| Calcium | 106 mg/100g |
| Phosphorous | 52.5 mg/100g |

PACKAGING

The standard pack is a multi-wall bag which incorporates a moisture barrier and contains the products within an inner polythene liner. No staples or metallic fasteners are used.

| | |
|--------------|--------|
| Net weight | 25.0kg |
| Gross weight | 25.5kg |

STORAGE AND HANDLING

ALACEN 895 should be kept in a cool, dry ventilated place. Temperatures below 25°C, relative humidities below 65% and an odour free environment will extend storage life. Packages should not be in contact with walls or floors. Stock should be used in rotation, preferably within six months of delivery.

QUALITY ASSURANCE

Strict quality control procedures are enforced during manufacture. The manufacturing environment is also subject to regular monitoring and control.

Final product is sampled and tested for chemical, sensory and microbial parameters using internationally recognised procedures.

During storage and shipment, precautions are taken to ensure that product quality is maintained. Each package is identified, enabling traceback

ALACEN 894

Whey Protein Isolate

P422.01.2000

ALACEN 894 is a soluble, >90%db whey protein isolate (WPI) product, manufactured by ultrafiltration (UF) and cross flow microfiltration (MF). Microfiltration naturally isolates undenatured protein providing a MF WPI product which is low in fat and high in protein.

ALACEN 894 has excellent nutritive value with True Protein Digestibility of 99.7%, PD-CAAS=1%, and PER=3.0. These qualities make ALACEN 894 particularly useful for protein fortified nutritional foods that require an excellent nutritional profile and/or solubility.

PRODUCT CHARACTERISTICS

- Excellent Nutritive Value
- Clean Flavour
- Soluble Over A Wide pH Range
- Low Fat & Low Cholesterol
- Low Lactose

SUGGESTED USES

- Protein Fortified Nutritional Foods
- Meringue & Whipped Toppings
- Low Fat & Lactose Foods

TYPICAL COMPOSITION ANALYSIS

| | |
|------------------------------|-------|
| Protein (N x 6.38) as is | 89.9% |
| Protein (N x 6.38) dry basis | 94.1% |
| Moisture | 4.5% |
| Fat | 0.2% |
| Ash | 3.2% |
| Lactose | 0.6% |

TYPICAL CHEMICAL ANALYSIS

| | |
|----|-----|
| pH | 6.9 |
|----|-----|

TYPICAL PHYSICAL PROPERTIES

| | |
|--------------------------|--------|
| Colour | Cream |
| Flavour | Clean |
| Scorched Particles (50g) | Disc A |

TYPICAL MICROBIOLOGICAL ANALYSIS

| | |
|---------------------------------------|--------------|
| Aerobic Plate Count (cfu/g) | <10,000 |
| Coliforms (/g) | Not Detected |
| E.coli (/g) | Not Detected |
| Yeast & Moulds (cfu/g) | <10 |
| Coagulase Positive Staphylococci (/g) | Not Detected |
| Salmonella (/750g) | Absent |
| Listeria (/50g) | Absent |

TYPICAL MINERAL ANALYSIS

| | |
|------------|-------------|
| Sodium | 280 mg/100g |
| Potassium | 901 mg/100g |
| Chloride | 11 mg/100g |
| Calcium | 310 mg/100g |
| Phosphorus | 199 mg/100g |

PACKAGING

The standard pack is a multi-wall paper bag which contains the products within an inner polythene bag. No staples or metallic fasteners are used.

| | |
|--------------|--------|
| Net weight | 20.0kg |
| Gross weight | 20.4kg |

STORAGE AND HANDLING

ALACEN 894 should be kept in a cool, dry ventilated place. Temperatures below 25°C, relative humidities below 65% and an odour

free environment will extend storage life.

Packages should not be in contact with walls or floors. Stock should be used in rotation, preferably within 24 months of manufacture.

QUALITY ASSURANCE

Strict quality control procedures are enforced during manufacture. The manufacturing environment is also subject to regular monitoring and control.

Final product is sampled and tested for chemical, sensory and microbial parameters using internationally recognised procedures.

During storage and shipment, precautions are taken to ensure that product quality is maintained. Each package is identified, enabling traceback.

ALATAL 819

Whey Protein Hydrolysate

WPH 926 is a high quality hydrolysate produced by a controlled enzyme treatment of whey protein which provides amino acids, peptides, and polypeptides. The whey protein base material is highly nutritious. Since the enzyme treatment is a mild and carefully monitored process, the essential amino acids remain intact and the high nutritional quality of the original protein is retained. WPH 926 is designed to provide a 10^{-4} -fold reduction in antigenicity while still retaining clean flavor.

TYPICAL COMPOSITIONAL ANALYSIS

| | |
|---------------------------------|-------|
| Protein (N x 6.38), dry basis % | 84.5 |
| as is % | 80.9 |
| Ash % | 4.7 |
| Moisture % | 4.3 |
| Fat % | 4.0 |
| Lactose % | 3.2 |
| Antibiotics (IU/g) | <0.01 |

TYPICAL MINERAL ANALYSIS

| | |
|--------------|------|
| Sodium % | 0.6 |
| Calcium % | 0.6 |
| Potassium % | 1.0 |
| Phosphorus % | 0.3 |
| Magnesium % | 0.02 |
| Chloride % | 0.3 |

SUGGESTED USES

- Enteral products for malabsorption
- Lactose-free nutritional products

PRODUCT CHARACTERISTICS

- Excellent nutritional quality
- Reduced allergenicity
- Very good solubility
- Good heat stability
- Low flavor profile

TYPICAL MOLECULAR ANALYSIS

| | |
|------------------------|------|
| Amino nitrogen % | 1.7 |
| Total nitrogen % | 13.4 |
| AN/TN % | 23 |
| Degree of hydrolysis % | 10 |

RECOMMENDED LABELING

Whey Protein Hydrolysate

TYPICAL MICROBIOLOGICAL ANALYSIS

| | |
|------------------------------|----------|
| Standard plate count (cfu/g) | <1,000 |
| Coliforms (cfu/g) | <10 |
| E. coli (lg) | Negative |
| Yeast & Mold (cfu/g) | <50 |
| Staph. Coag. Pos. (lg) | Negative |
| Salmonella (750g) | Negative |

TYPICAL PHYSICAL PROPERTIES

| | |
|-----------------------------|------------------------|
| Color | Cream |
| Sensory | Clean, slightly bitter |
| Bulk density (packed, g/mL) | 0.50 |
| pH (5% at 20°C) | 7.2 |
| Solubility % | 100 |

PACKAGING

Heat sealed, multiwall kraft paper bags. Polyethylene bag liner individually closed. No staples or metallic fasteners.

| | |
|-----------|---------------------|
| Net wt. | 50.0 lbs. (22.7 kg) |
| Gross wt. | 50.8 lbs. (23.1 kg) |

ENZYMES

All protease enzymes used in WPH 926 manufacture are food grade and acknowledged by the U.S. Food and Drug Administration to be Generally Recognized As Safe (GRAS).

STORAGE

Whey Protein Hydrolysates are best used within one (1) year of receipt by customer when stored under proper conditions. Since hydrolysates are hygroscopic and can absorb odors, it is recommended that product be stored at temperatures below 25°C, relative humidity below 65%, and in an odor-free environment.